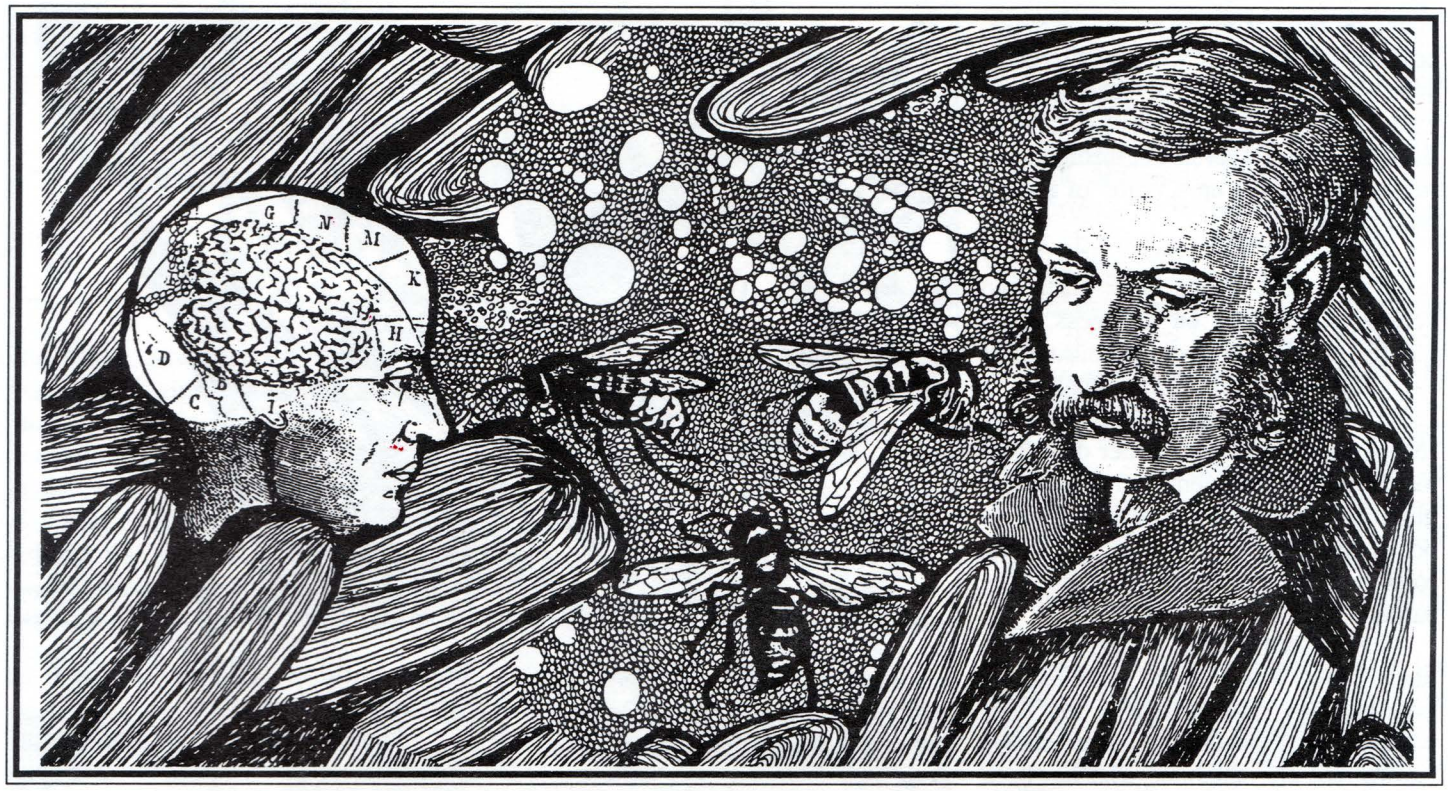
INTERSPECIES COMMUNICATION
Newsletter Spring 1988



Yellowjacket Saints

It's been a dry summer here, a dry year, a dry two years; the kind of weather that persuades the wasps to arrive in full force. I was cutting a joint into a board with a Japanese saw: a kind of wide, flat, sharp-toothed spatula-shaped tool that permits one to slice through wood with extraordinary precision. The yellowjackets were obviously attracted by the sweet smell of fir sawdust. One at a time they buzzed right up to my sawing arm, right through the invisible boundaries of my personal space until - "swish", some reflex causes me to start wielding the saw as a weapon. My ears register the slightest "tick" as springy metal whips up against the hard cuticle of insect skin; "hzzz", the saw blade momentarily vibrates into song before, "thud!" it slams against the dry mossy ground. Finally after four or five blows, I pause a moment to peruse the results of my vengeance. There, just beyond the frontier of my bare feet, lie six yellowjackets in disarray. Two have been dismembered, wings and body sections strewn across a foot or more of ground. Two more lie whole but unmoving, their skin broken, a dark amber liquid beading out from the tear in the thorax. The last two are yet alive, quivering at a rate beyond the ability of my eyes to capture. They seem stunned, but still healthy.

More yellowjackets appear. This time, their advance registers like a buzz saw ripping through my insides. "Tick, hzzz, thud": within moments the bodies of fourteen more yellowjackets lie broken against the two foot wide swathe of ground that has become our battlefield. But still, I am unable to claim a clear victory. As soon as this squadron gets annihilated, I already hear the sympathetic vibrations of fresh recruits racing towards their supposed "enemy", namely me. If anything, the battle grows ever more lopsided.

An entirely new mood arrives on the wings of this new horde. Is it my imagination, or do they actually buzz less ferociously? Mostly, I can not help but notice that these replacements appear quite disinterested in either the sawdust or in me. Instead, they zoom directly into the hub of their fallen comrades, urged to action by some new and quieter task. This change in tactics forces me to drop both my guard as well as my saw, and so peer downward directly into their midst. Down and down I probe, my eyes refocusing several times as this vast mass of a giant finally perceives a glimmer of the unimaginable universe that is the yellowjackets' domain.

Lying on my side, face rubbing up against the moss, I behold an epic spectacle of yellowjackets. They drop down out of the sky one by one, land upon their fallen comrades, turn them this way and

that to find a good strong six-armed grip, and so lift them bodily up into the air. I watch as one insect hovers a mere millimeter from the ground, attempting in vain to gather and match up the various parts of a dismembered comrade. Are the yellowjackets rescuing one another? I can only fantasize that this airlift, this potential mission of mercy, will eventually conclude back at the hive; the wounded soldiers ministered back to health by other yellowjackets capable of secreting enzymes and hormonal potions that serve as the social insect's version of medicine. So my mind conjures up a vision of a wasp field hospital.

As I watch, ten, fifteen, and finally twenty or more of the sleek black and yellow insects land on the moss, buzz quietly, and then go about the business of carrying away their kin. Somehow, a creature who displays such compassion for its mates deserves a better deal from me. With that sentiment well in tow, this giant chooses to relent. He stands up, postpones his original ambition of sawing some boards, and walks away from the battle.

Battle? Is that what it was? Not very likely. Now I wonder if the yellowjackets ever had any real interest in my flesh whatsoever. Furthermore, I've always known that my daughter, who has been getting stung quite regularly of late, flails at the wasps because she's frightened by the potential threat of a sting, which, significantly, never seems to come until after the flailing. In retrospect, it seems a classic case of interspecies miscommunication - the yellowjackets get flailed, my daughter gets stung.

Later that same day, in retelling the story of the saintly yellowjackets to a friend and colleague, I am unabashedly accused of inventing a scenario that, in fact, exists nowhere in nature. Certainly wasps are altruistic by the "official" biological definition of that term; meaning that the individual gives up its independence, its daily activities, and many times even its life for the benefit of the hive. But a wasp field hospital? Compassion? You've got to be kidding.

Genuinely confused by this alteration in my perspective, I decide to call upon the expertise of an entomologist, an insect scientist. Introducing myself over the phone as an insect aficionado, I ask him to please interpret my description of observed yellowjacket behavior. He pauses as I conclude my tale, clears his throat, and then scolds me for attributing human qualities to the motives of an insect. "Wasps do not care about one another as

we humans sometime do. Nor do they exhibit compassion. In fact compassion is not even a term within the biological lexicon."

Instead, the entomologist chooses to lay the entire incident at the feet of pheromones, those chemical smells and tastes that make up the form and content of yellowjacket communication. Certain pheromones mean defense, others mean food, so on and so forth. When I swatted those yellowjackets out of the sky, the blows indubitably caused them to expel a chemical field. The original pheromone meant food (the sweet fir sawdust). This primary smell was then coupled with an alarm aroma sent off by those wounded during the subsequent assault. "Yum Yum! Help! Help!" wafted the aroma of the pheromones. The yellowjackets arriving on the second assault continued to send out the mixed message. However now the call for food began to predominate the airwaves. The reason was simple. Being scavengers and predators, these yellowjackets arrived to find an incredible windfall of victuals, namely, their dead and dying brethren. No personalities here, no friendship, no insect airlift, no individual emotions as we understand them. Subsequently, no empathetic qualities upon which to hang moral comparisons with human society. No, just meat! In zoomed the wasps from every direction. "So," concludes the entomologist, "the insect world is even more how shall we say, ruthless than our own."

I am well aware that zoological convention necessarily scolds the entomologist for utilising the same descriptive anthropomorphism for which he had earlier scolded me. I had described the "compassion" of the wasps. Now he chooses to call them, ruthless. But to be fair, he first excuses himself before falling on that term. The verboten expression is utilized by such as he to describe an animal's behavior to such as me; chosen for no other reason than to shoo away my own crazy ideas; utilized only to enforce his message about the utterly cold neutrality of a wasp's heart in a language, no matter how flawed, that I can understand. In conclusion says he, my own observations of yellowjacket behavior will be forever imperfect until such time as I educate myself to embrace both the objective methodology and precise language of entomology. But can he really believe such a thing? It reminds me of the nun who once told me that I could never understand compassion until I first embraced Jesus. How else can any of us grasp the subtleties of nature unless we rely upon all the varieties of our own acoustic version of the pheromone,

namely human language?

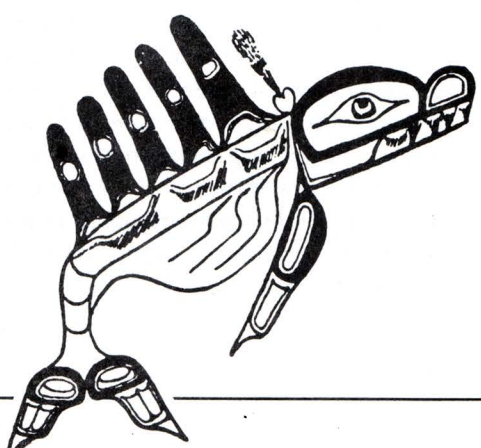
Human speech is an extension of the minds' own ability to think and grasp ideas. Can we expect to void our language of its symbolic, metaphorical, moral, and emotional context, and then honestly expect that our consciousness has been equally voided as well? No doubt, this particular entomologist would answer in the affirmative: only by cleansing our language of its mixed messsages can we expect to perceive nature as it is. If that is true then we must also believe that the scientific objective viewpoint offers the final word on perception. Unfortunately, what such a judgement seems to render in the real world is, instead, a perceptual buffer stuck between our conscious thoughts and our very important gut connection to nature. That buffer too easily transmutes into a weapon; ostensibly protecting us from our feelings, our playfulness; indeed, even our compassion for the plight of animals. And finally, how easy it becomes to use that sterilized weapon to capture and finally imprison a nature devoid of our own heart. The animals, now little more than the objects of our objectivity, are unendowed with either motive, emotion, or choice. They have been divested of their poetic lucidity.

By the end of my phone conversation with the entomologist, I am left more dissatisfied than before; but not by my continuing inability to comprehend the mystery of the yellowjackets. No,in fact, I'm starting to grow rather fond of the mystery. Rather, now I grow disgusted by this expert's dogma. None of the human emotional models by which we appraise each other seem to even apply to the rest of the animals. Yellowjackets are certainly not saints, nor are they even faintly compassionate. Rather, they are like the language of science, itself - amoral and neutral - in a word, machines. The medium is the message.

I returned to my task of sawing wood the very next afternoon. Yes, the yellowjackets flew in my face for a taste of human sweat and sawdust. This time however, I felt quite unwilling to swat them out of the sky. That is not to say that I refused to accept the story that the wasps were cannibalizing their mates. Of course they were. But on the other hand, despite the cannibalism, I still clung to my vision of yellowjacket saints - Possibly one, yes maybe just one out of twenty was being airlifted to a spot beyond the reach of my saw. So too, I made peace with my own particular rendition of scientific observation. I have concluded that none of our observations are ever objective. No, they are instead, just various and sundry forms of poetry. So, all of the different observations add up to the same amount of truth as any one of them alone. And in conclusion, we become much more skillful observers when we embrace a generalist's sensibility instead of a frozen notion that defines truth as the exclusive domain of any one outlook. That is the truth, as best we can know it.

I have read that some researchers, addressing the incredible challenge of translating dolphin whistles or chimpanzee signing into English, poeticise the enormous intellectual gap that exists between the species by stating that it is like learning to talk to an extraterrestrial. Actually, compared to a yellowjacket, dolphins and chimps seem more like members of my own immediate family - friendly and familiar. If we are to believe that dolphins are "extraterrestrials"; in effect, the ultimate strangers; what does that make the yellowjackets? Mostly, it makes them more in need of a good press agent. Perhaps that is the purpose of this writing. I have been dragged, kicking and screaming against my will, into the role of an apologist for yellowjackets. Yet I offer no apologies that this, my first press release, is neither effusive nor worshipful. I think of my swollen daughter and reject the idea outright. Neither does it mean that I have suddenly been filled with the expert's final word on yellowjacket diplomacy or motive. Rather, for the first time I have bent down far enough to the ground to scrutinize the pulse of their universe. That observation, and moreso, that communion, have served to still my hand.

Jim Nollman

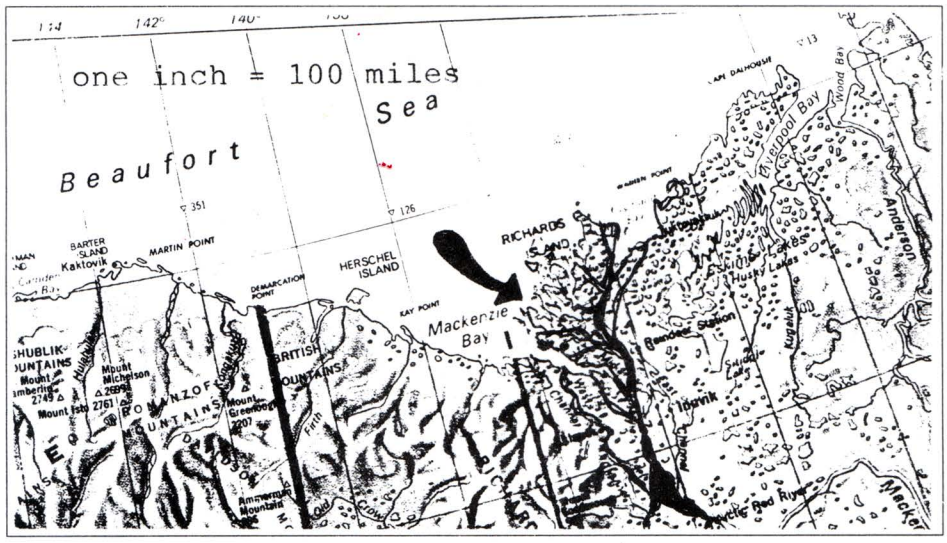


Beluga Peace Project - An Update

IC sent two representatives up to the Bering Strait last June to implement phase one of a communication project with the beluga whales who inhabit the Arctic environment. Our exploratory visit to the Strait proved productive, helping to familiarize the project members with the logistics of mounting an acoustic and ocean-based study from within that often inclement environment. It also verified our basic assumption of developing a longterm communication relationship with this very vocal and social species of cetacean. This, despite the fact that our expedition also verified that the Bering Strait is certainly not the optimum locale for creating an interface with beluga whales.

IC's ongoing exploration with the belugas was conceived from the start as a platform for Soviet/American collaboration. Any such venture between musicians, scientists, and native people from our two countries seems an especially worthwhile event for the times we live in. Furthermore, because this collaboration focuses entirely upon the creation of a dialogue with another species, the metaphor of a "peace bridge" becomes tremendously potent. Towards this end, we have learned that the belugas tend to congregate at the deltas of certain large rivers along the Arctic coast of Siberia and Canada. For one example, the huge MacKenzie delta of Arctic Canada is known to be the temporary home for as many as 15,000 migratory belugas during the brief ice-free period of mid-summer. Significantly, IC's consultants within the network of Soviet/American citizen diplomacy have strongly recommended that before we submit a proposal to the Soviets, we first gather more experience in direct contact with the belugas. As such, IC has decided to sponsor its 1988 expedition up to the MacKenzie river during the first two weeks in July. This period of time will be spent developing the actual techniques needed to establish a communication dialogue with the belugas. We are also preparing to go directly into the water if appropriate.

The arrow points to the vicinity of our project site in the Canadian Arctic.



Detail of the MacKenzie River Delta. Our project site is highlighted.

IC has recently received a scholarship to pay for the participation of a Soviet citizen during this summer's Canadian work. We are now in the process of networking our contacts to find and invite a Soviet participant who can join the expedition in the spirit of its longterm goals. IC is also involved in networking the Beluga Peace Project among film production companies, potential long-term sponsors, citizen diplomacy advocates, and the whale research community. In fact, one of our prime Soviet candidates for the scholarship is also a distinguished film maker who has already made a film about Shamanism in the Siberian Arctic.

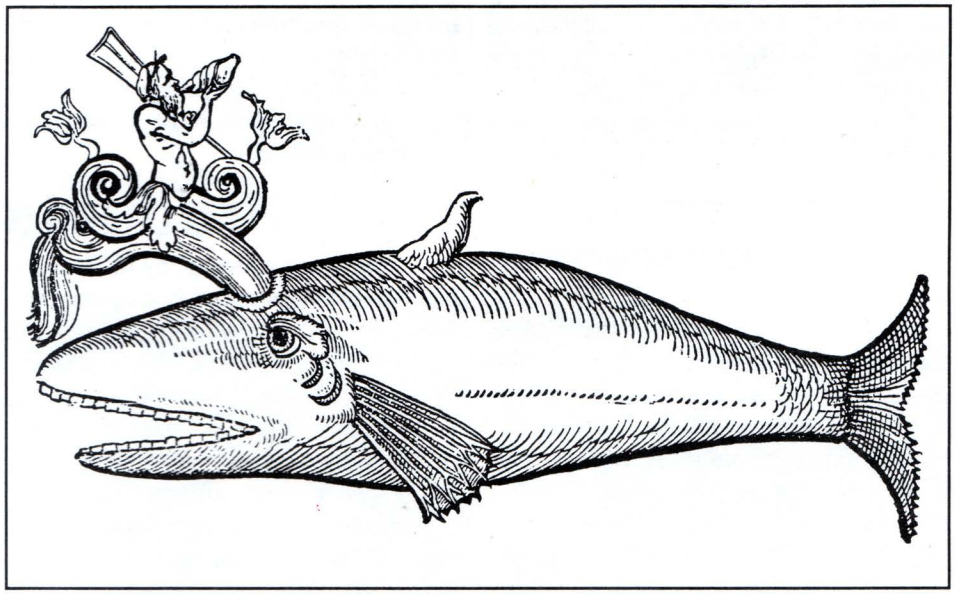
The committed crew for this venture includes: *Mike Sofen*, who has been IC's recording engineer for several years, as well as the designer and builder of our underwater sound system. *Mickey Remann* is a well-known German artist and writer who will be documenting the project for GEO magazine. *Jonathan Churcher*, our Canadian member, is a psychic and photographer who will be flying up to the delta in May to scout the area in anticipation of our own arrival in late June. *Jim Nollman*, director of research for IC, is a longtime explorer of the communication interface that exists between humans and animals. *Chip Porter* is a longtime IC project member with much expertise in both ocean and wilderness expeditions. We are also considering the participation of an American film maker, as well as our Soviet member, making a maximum crew of seven. IC thanks *Jim Hickman, Gigi Coyle,* and *Alan Slifka* for their invaluable help and support in moving this project forward. If any of our readers are interested in helping us manifest the project through a tax-deductible donation, please contact IC.

Humpback Whale Encounter

Bill Rossiter is an IC sponsor, as well as the vice-president of the Cetacean Society International. For years now, Bill has been motoring his little inflatable boat out into the North Atlantic in hopes of interacting with the humpbacks who travel up and down along the coast. This incredible story describes one of his more provocative encounters.

At 1215 EDT, 15 June 1983, Stub, an adolescent male adult humpback, and Sirius, a yearling, also seemingly a male, began to maneuver at the surface very close to my boat. The outboard motor was in slow idle. For the next 48 minutes Stub oriented closely to the boat, while Sirius behaved either playfully boisterous or somewhat bored - either seeking attention or trying to convince Stub to move on. At the whales' first approach I decided against any effort to record, photograph, or play music. I tried instead to react to feelings. With wetsuit hood and facemask in place I leaned over the starboard side and put my head in the water. Several good reasons precluded entering the water, now or later, although none of these related to aggression by the whales. There was no question that this was a benign affair.

Stub stopped parallel to the boat with his head to the bow, his left eye about a meter from my face. Eye contact was prolonged and repeated. While he did touch the boat with his head, his major effort was to stabilize his left eye close to my own head. By maneuvering, he could more freely move his very long pectoral fins. I started to match this pect movement with my arm. The mimicking included arcs and shoulder rotation. I'm not certain who mimicked whom, because all movement was very slow so that the starts and stops were sometimes obscured. The pect movement was not to stabilize or move; it clearly related to my arm. At times, his eye was as close as 20 cm from my own. Stub's correlation of pectoral fin to arm was suggested by his repeated effort to bring himself to touch my outstretched hand, while hovering on his side two me-



ters below. Several times his pect would rise slowly, with suggested hesitation, to move within inches of my hand. He seemed timid. Once, he pivoted around, which made his eye, rostrum, and other eye pass equally close to my head. The control was incredible. He could reach and maintain any position relative to me, and control it to the centimeter. He preferred to look with his left eye.

Once, with Stub's upper jaw against the bottom of the bow, I placed two fingers on his head, just above the line of the mouth. In response he ducked and then moved forward, only to stop and then reverse direction. I made no other attempts to touch him while out of direct line of sight. Would he have reacted differently to a warm, flat palm?

Because every part but Stub's flukes were within a meter from me at some point, any moderate action could have hit me. Yet while I considered the chance of such a mistake, I also felt no concern. I never made the whales responsible for my safety, nor did I limit their own control of the event.

I tried to sense vibration or sounds with my head immersed in the water. Perhaps the motor should have been stilled. Still, I was not aware of any sound from either whale. Later, standing up, I did feel a vibration, but couldn't be certain of the source. I produced sounds, with and without bubbles. There was little response. More response came when I squeaked or tapped the boat but only resulted in a closer approach or more focused attention. I was acutely aware that I was missing a great deal. The environment, circumstances, and my own limits, both sensory and conscious, precluded a good deal of perception of the event.

While Stub moved with great care, Sirius the calf was far more active and physical. At some point every part of Sirius was held high above the surface. He stood on his head, slapped his pects and flukes, spyhopped, tumbled, and often churned up a froth. He also made several attempts to push Stub down or away. Yet I only noted one retaliation by Stub which was not aggressive. The image of Sirius was of a bored puppy who was outside the interface between Stub and I, except when he literally curled under the bow to then shove it with his dorsal fluke. The boat didn't move much. In general, we both ignored Sirius, even when a repeated tail slap hit a stern pontoon. There was no attempt at real force, and thus, no damage. Sirius' flexibility was enormous. One simultaneous appearance of fluke and head was so rotated and bent that it looked like two whales.

After 25 minutes with my head in and out of water I stood up for a better perspective and to try other things. At that close range the humpbacks seemed to pass by endlessly, like a spaceship from the Star Wars Trilogy. The encounter continued for another 23 minutes. Significantly, it ended just two minutes after I finally brought out my camera. There is no question in my mind that the camera broke the contact between us. Stub came up to the port stern, stabilized with Sirius just inside and behind, then surged down and away with the strongest movement of the event. They resurfaced about two minutes later 200 meters east, and set up a slow transit northeast. I did not follow.

All I had was my own vision, and that seemed so sorely limited. Still, rich memories of the event include tubercule hairs, barnacles, cyamids, worn and scarred skin, shapes and textures of mouth, throat and belly, a quivering back while flexing, a wide range of colors. Most of all was Stub's eye with its brown-grey iris, dull cornea, and surprising rotation and projection. There was a mind behind that eye. I have little proof that he felt the same about my own eye. Even though a minute here was worth an hour of "normal" observations, still, my description of this event seems severely limited by language and perception.

Finally, besides the sharing of it, for whatever value it may have for you, I ask that you try to answer the following question: what would you have done differently to end the event, knowing that the most had been made of it by both whale and man?

Bill Rossiter

"I never made the whales responsible for my safety, nor did I limit their own control of the event."

Purpose

Interspecies Communication, a non-profit educational organization founded in 1978, maintains a program of research that seeks to better understand what can be communicated between human beings and other animals. Our methods focus upon an integration of the arts and the sciences, with a strong emphasis placed upon environmental preservation. The ongoing work of IC functions primarily as an expression of what it means for humans to re-establish their emotional and cultural ties with the natural world.

Over the years, Interspecies Communication Inc. has been sustained by generous donors. We are grateful for the support we have received in the past, and continue to open the organization to

There is an old legend that when the Gods made Man they fell to arguing where to put the Answers to Life so that Man would have to search for them.

One God said, "Let's put the Answers on top of the Mountain. He will never look for them there."

"No," said the Others, "He'll find them right away."

Another God said, "Let's put them in the Center of the Earth. He will never look for them there."

"No," said the Others, "He'll find them right away."

Yet another spoke, "Let's put them at the bottom of the Sea. He will never look for them there."

"No," said the Others, "He'll find them right away."

Silence fell ...

After a while, another God spoke, "We can put the Answers to Life within Man. He will never think to look for them there."

And so they did ...

-- suggested by Carolyn Forman

membership. We encourage suggestions about how we might better serve through this newsletter and welcome personal interspecies stories for inclusion in future issues.

Acknowledgments

We at IC gratefully thank The Sunflower Foundation, and the Slifka Foundation for recent major contributions. We also thank these members for their support over and above the minimum subscriber donation: Victoria Selmier, Suzanne Lewis, Burrill Crohn, Chris Jurzykowski, Dwight Tuinstra, Georgia Tanner, AJ Coyle, and Jane Van Dusen. We also thank Microsoft for a recent in-kind donation.

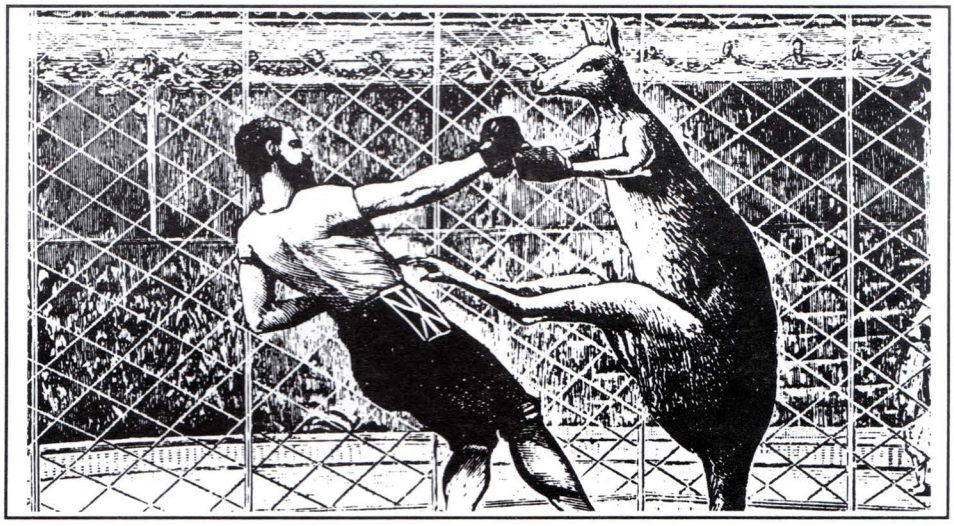
Lastly, IC offers a special humble thank you to Sandra Wilson, who recently resigned from both our Board and the editorship of this newsletter to pursue a new direction in her life after serving IC for more than five years. Your contribution has been immense.

Products

1. *Animal Dreaming*, by IC founder, Jim Nollman, and published by Bantam, delineates in an anecdotal style the authors's fifteen years of interspecies research with animals as varied as whales, mosquitoes, turkeys, buffalo, etc.

2. *Playing Music with Animals*, a Folkways record album, containing interspecies music between humans and turkeys, wolves, and orcas; recorded during various IC field projects.

3. *Orcas Greatest Hits*, produced and distributed by IC, includes the best selections from our own orca projects between the years 1978-1985.



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